

Kentucky Department of Education
Science Adoption 2008-2014

Provided by the Publisher	ISBN - 0534420729		Publisher - Thomson Learning		Provided by the Publisher
	Introduction to Marine Biology				
	Type - P1	Author - Karleskint/ Turner/ Small			
	Copyright - 2006	Edition - 2nd	Readability - 10.7 Flesch Kincaid		
	Course - Marine Biology		Grade(s) - 9,10,11,12		
	Teacher Edition ISBN if applicable			0534420737	

Overall Recommendation:

☒ **Recommended as Basal**

Overall Strengths, Weaknesses, Comments:

This basal would be appropriate for an AP Marine Biology course. Pre-requisite of Biology and Chemistry would be helpful. Note the reading level of the text. This text is filled with colorful photographs, illustrations, and tables that support the high level reading.

CRITERIA

This basal resource ...

A. Encompasses KY Content Standards & Grade Level Expectations

☐ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

☒ Text is designed to be used in an elective course outside the Program of Studies

1) Includes the 7 Big Ideas of science to the following extent:

- | | |
|---|---|
| a) Structure and Transformation of Matter | <input type="checkbox"/> Strong <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |
| b) Motion and Forces | <input type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input checked="" type="checkbox"/> N/A |
| c) The Earth and the Universe | <input type="checkbox"/> Strong <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Little <input type="checkbox"/> N/A |
| d) Unity and Diversity | <input type="checkbox"/> Strong <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Little <input type="checkbox"/> N/A |
| e) Biological Change | <input checked="" type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |
| f) Energy Transformation | <input type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input checked="" type="checkbox"/> N/A |
| g) Interdependence | <input checked="" type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |

2) Addresses content-specific enduring understandings from the related Program of Studies standards.

☒ Strong ☐ Moderate ☐ Little ☐ N/A

3) Addresses content-specific skills and concepts from the related Program of Studies standards.

☒ Strong ☐ Moderate ☐ Little ☐ N/A

Kentucky Department of Education
Science Adoption 2008-2014

4) **Content addressed is current, relevant and non-trivial** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

5) **Provides opportunities for critical thinking/reasoning** ☐ Strong ☒ Moderate ☐ Little ☐ N/A

6) **Strengths, Weaknesses, Comments:**

- Specific strengths-which areas/concepts are covered exceptionally well?
- Specific weaknesses-which areas/concepts would likely require supplementing?

Minimal critical thinking questions at the end of each chapter. Some essay questions available at the end of each chapter in Teacher's Manual, but not really critical thinking. e) strong as it relates to Marine Biology.

B. Functionality & Suitability

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

1) **Suitability** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

- Should be suitable for use with a diverse population and is free of bias regarding race, age, ethnicity, gender, religion, social and/or geographic environment; is free of stereotyping or bias of any kind.

2) **Content quality** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

- Free from factual errors
- Content is presented conceptually when possible—more than a mere collection of facts
- Content included accurately represents the knowledge base of the discipline
- Theories/scientific models contained represent a broad consensus of the scientific community

3) **Connections to Literacy**

Note: may apply to either student or teacher editions

☒ Strong ☐ Moderate ☐ Little

- Employs a variety of reading levels and is grade/level appropriate
- Contains pre, during, post reading activities
- Provides opportunities for summarizing, reviewing, and reinforcing vocabulary skills and concepts at multiple levels of difficulty for a variety of learning styles.
- Student text provides opportunity to integrate reading and writing
- Uses vocabulary that is age and content appropriate
- Focuses on critical vocabulary vs. extensive lists
- Identifies key vocabulary through definitions in both text and glossary
- Engaging text- does the text facilitate learning?
- Does understanding the text require having performed the imbedded activities?

4) **Connections to Technology** ☒ Strong ☐ Moderate ☐ Little

- Integrates technology and reflects the impact of technological advances
- Uses technology in the collection and/or manipulation of authentic data

5) **Support for Diverse Learners** ☐ Strong ☐ Moderate ☒ Little

Kentucky Department of Education
Science Adoption 2008-2014

- Provides support for ESL students
- Provides support for differentiation of instruction in diverse classrooms
Note: may apply only to teacher edition

6) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

3) Every chapter begins with Key Concepts, new vocabulary are written in bold print and are supported with a glossary. Key vocabulary is listed at the end of the chapter referenced with page numbers. There is a short summary at the end of every chapter. The boxed reading sections demonstrate application of content knowledge. 4) The student website has interactive quizzes and tests, glossary, animations, flash cards, web links, and guest essays. The high reading level of this text would not support below grade level readers.

C. Supports Inquiry and Skill Development

- ☐ Strong Evidence
☒ Moderate Evidence
☐ Little or No Evidence

1) Promotes Inquiry, research and Application of Learning

☐ Strong ☒ Moderate ☐ Little

- Provides opportunities for inquiry and research that includes activities such as self-selecting topics, formulating authentic questions, gathering information, researching resources, observing, interviewing, and evaluating information, analyzing and synthesizing data and communicating findings and conclusions.
- Requires students to use higher-level cognitive skills (analysis, synthesis, evaluation, etc.)
- Provides activities and projects for students to deepen their knowledge and cultivate and strengthen problem-solving and decision-making skills.
- Provides opportunities for application of learned concepts.
- Uses a variety of relevant charts, graphs, diagrams, time lines, and other illustrations to invite and motivate students to engage in discussion, problem solving, and other high-order thinking skills.
- Emphasizes conceptual understandings that invite students to predict, conclude, evaluate, develop and extend ideas to support reasoning.

Note: may apply to either teacher or student edition

2) Skill Development

☐ Strong ☐ Moderate ☒ Little

- Provides opportunities to make sense of data
- Provides opportunities for critical thinking and reasoning (analyze arguments, distinguish fact/opinion, recognize bias)
- Provides opportunities to examine a range of types of evidence
- Contains embedded activities (or extensions) that emphasize use of technology for problem solving

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

The web site gives links for various critical thinking activities. Minimal critical thinking questions at the end of each chapter. Some essay questions available at the end of

each chapter in Teacher's Manual, but not really critical thinking. e) strong as it relates to Marine Biology.

D. Supports Best Practices of Teaching and Learning

☒ Strong Evidence
☐ Moderate Evidence
☐ Little or No Evidence

1) Engages Students

☒ Strong ☐ Moderate ☐ Little

- Includes content geared to the needs, interests, and abilities of students
- Engages and motivates students using components such as real-life situations, simulations, experiments, and data gathering.
- Includes information and activities that assist students in seeing relevance of concepts (where appropriate) to their own lives and experiences
- Provides a variety of strategies, activities, and materials to enhance student learning at the appropriate learning levels
- Activities are truly congruent to the concepts addressed, not merely correlated

Note: may apply to either teacher or student edition

2) Uses Assessment to Inform Instruction

☐ Strong ☒ Moderate ☐ Little

- Includes multiple means of assessment as an integral part of instruction
- Provides evaluation measures in the teacher edition that supports differentiated learning activities
- Embedded assessments reflect a variety of Depth of Knowledge levels

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards

2) The student text includes critical thinking questions at the end of every chapter, the instructor's manual has a test bank including multiple choice, true-false, matching, and essay style questions.

E. Has an Organization/ Format that Supports Learning and Teaching

☒ Strong Evidence
☐ Moderate Evidence
☐ Little or No Evidence

1) Organizational Quality

☒ Strong ☐ Moderate ☐ Little

- Print and/or electronic materials present minimal barriers to learners
- Presents chapters/lessons in an organized and logical sequence
- Provides clearly stated objectives for each lesson.
- Uses text features (e.g., titles, headings, subheadings, review questions, goals, objectives, space, print, type size, color) to enhance readability.
- Makes use of various forms of media (e.g., CD's, recordings, videos, cassette tapes, computer

Kentucky Department of Education
Science Adoption 2008-2014

- software, web-based components) as either student or teacher resources
- Includes clear, accurate, appropriate and clearly explained illustrations and/or graphics that reinforce content standards.
 - Incorporates a glossary, footnotes, recordings, pictures, and/or tests that aid pupils and teachers in using the book effectively
 - Uses grade-appropriate type size
- Included media are durable, easy to use and have technical merit
- Construction appears to be durable and able to withstand normal use

2) Essential Components (beyond student and teacher text)

☒ Strong ☐ Moderate ☐ Little

- Items identified as essential components support the learning goals and concept coverage of the basal

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

Student text uses a variety of font styles and colors to highlight important ideas. Font size is very small. Vocabulary is in bold print, supported by a glossary. Key terms listed at the end of each chapter, referenced with page numbers. Student text includes thomsonedu.com web access. The website includes interactive quizzes, articles, flashcards and links.

F. Has available Ancillary/ Gratis Materials

Note: The decision whether to recommend or not recommend this resource as a basal should not be influenced by Section F

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

1) Ancillary/Gratis Materials

- Coordinates teacher resources easily with student material (e.g., accompaniments included, student pages shown, instructional technology indicated).
- Are well-organized and easy to use
- Provide substantive learning opportunities and are congruent with student learning goals
- Provide opportunities for high-level thinking, assessment, and/or problem solving

2) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

Laboratory manual, media manager, and test generator are available for purchase.